

Abstract of the Invention

Methods, systems, computer readable media are provided which facilitate the selection of multiple paths through a network represented by a network topology which take 5 into account shared risk which may exist between network resources. The method involves identifying a first path through the network topology from a source node to a destination node, the first path comprising a first sequence of network resources. For at least one shared risk group, a 10 determination is made if any of the at least one shared risk group includes any of the first sequence of network resources, a shared risk group being a group of network resources within the network topology which have a shared risk. A topology transformation is performed of the network topology into a 15 virtual topology which discourages the use of network resources in any shared risk group determined. A second path through the virtual topology is identified from the source node to the destination. The method may be adapted to encourage node and/or edge disjointness.